

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Recommendations of the Independent Panel
Reviewing the Impact of Hurricane Katrina on
Communications Networks

EB Docket No. 06-119

COMMENTS

BellSouth Corporation, on behalf of itself and its wholly owned subsidiaries (“BellSouth”) hereby submits its comments in response to the Notice of Proposed Rulemaking (“*NPRM*”) released on June 19, 2006. BellSouth, whose representatives served on, and contributed to the work of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks’ (“Independent Panel” or “Panel”), commends the Panel, the Commission and Chairman Martin for embracing the challenge of assessing Hurricane Katrina’s impact on communications networks and, in so doing, beginning a national discussion on how to safeguard those networks in the event of future disasters. BellSouth, on the whole, supports the Independent Panel’s proposals and recommendations presented in its June 12, 2006 report to the Commission (“Report”), upon which the *NPRM* is based. Further, and consistent with the Panel’s objectives and charter, BellSouth proposes additional steps that the Commission should take in order to enhance disaster preparedness and post-disaster restoration. Based on BellSouth’s experience with Hurricane Katrina’s extraordinary challenges, as well as its

considerable experience with other hurricanes in its region, these additional proposals will promote effectiveness and efficiency in future post-disaster response and recovery efforts.¹

I. INTRODUCTION.

The Independent Panel was formed in January 2006 in order to study Hurricane Katrina's impact on telecommunications and media infrastructure.² The Panel was further charged with issuing findings and recommendations for disaster preparedness, network reliability and emergency responder communications improvements. The Panel's Report identifies and comprehensively addresses a number of significant issues raised by Hurricane Katrina in the areas of network reliability and resiliency, recovery coordination and procedures, communications between and among emergency personnel ("First Responders"), and emergency communications to the public.

Though the devastating social and economic impacts of Hurricane Katrina were truly national in scope, the disaster's acute effects were concentrated, obviously, in the Gulf Coast region, *i.e.*, Louisiana, Mississippi and Alabama. These three states are part of BellSouth's incumbent local operating territory, and the impact of the disaster on BellSouth's customers, employees and network is impossible to overstate.

Thirteen thousand of BellSouth's employees are located in Alabama, Mississippi and Louisiana. Of these, approximately 6,500 worked in the areas hit hardest by the storm.³ The

¹ Since 1992, BellSouth has successfully conducted network and service restoration with respect to 22 hurricanes, including Katrina, Andrew, and Rita. This experience is in addition to Hurricanes Hugo (1989) and Camille (1969), two of the most destructive hurricanes on record.

² As used in these Comments, the terms "communications networks" or "communications infrastructure" have the same meaning as that given them by the Panel. *See* Report at 1, n.1 (the terms "are intended to refer to both telecommunications (e.g., telephony, wireless, satellite, wireless internet service ["WISP"]) and media (e.g., radio, television, cable) infrastructure.")

³ *See* Testimony of William L. Smith before the United States House of Representatives, Energy and Commerce Committee, September 7, 2005 at 3 ("Smith Testimony").

hurricane's impact on them, like their neighbors, was catastrophic. Many of these employees were forced from their homes by Katrina and had to live in tent cities erected by BellSouth to provide shelter, supplies and services to affected employees. Indeed, at one point, BellSouth was operating six tent cities for its employees and their families and was serving over 8,000 meals per day in those facilities.⁴

Hurricane Katrina was the most destructive hurricane in the nation's history, severely damaging communications networks and disrupting communications services throughout the Gulf Coast region. The demands that Hurricane Katrina placed on BellSouth's restoration efforts were extraordinary. BellSouth has 1,591 central office buildings across its region, 578 of which are located in Alabama, Louisiana and Mississippi.⁵ These offices served 4.9 million access lines. Although 545 of BellSouth's 578 central offices in the Gulf Coast never lost service during the storm, 33 central offices were damaged, affecting an estimated 2.475 million lines – approximately half of the lines in the area.⁶ Of these 2.475 million lines, approximately 1.6 million were in areas where the damage could be accurately described as “catastrophic,” and approximately 782,000 were in areas of “severe” damage.⁷

Despite BellSouth's extensive hurricane restoration experience prior to Katrina, Katrina was a unique storm that presented a new set of challenges. The hurricane had three distinct phases – the Florida hurricane, the Gulf Coast hurricane, and the New Orleans flooding.

⁴ See *id.* at 3-4. These facilities were in Baton Rouge, Covington and Marrero, Louisiana, and in Hattiesburg, Jackson and Gulfport, Mississippi. *Id.* at 4.

⁵ See Statement of Rod Odom on Hurricane Katrina Status before the Federal Communications Commission, September 15, 2005, at 4 (“Odom Statement”).

⁶ See Smith Testimony at 5; Odom Statement at 4. In addition to the 33 central offices damaged by the storm, 15,722 poles were damaged, as well as 48,485 spans (the portions of high speed digital systems that connect central or terminal offices to each other), and 63,555 drops (the wires or cables that run from poles or cable terminals to buildings). Odom Statement at 3-4.

⁷ See Smith Testimony at 5.

Generally, hurricanes have an initial surge, the waters recede, power restoration begins, and then BellSouth follows the power company with telecommunications restoration forces. However, when the storm waters breached New Orleans' levees, the waters did not recede. The flooding caused significant disruption beyond what would normally have been associated with even a strong hurricane. The significant and continued flooding led to unprecedented security issues. As a result of the dynamics of those two factors, the back-up generators that kicked in during the widespread power outages gave out in several central offices due to BellSouth's inability to refuel them.⁸

BellSouth's top restoration priority in the immediate aftermath of Katrina, as with any hurricane, was to focus support resources on public safety, including hospitals, E-911 centers and law enforcement. Although no E-911 centers in Alabama and Florida (which also experienced Katrina damage) incurred outages as a result of Katrina, service was impacted in 43 out of 138 Mississippi E-911 centers, and 35 out of 91 E-911 centers in Louisiana.⁹ Service to all of the Mississippi E-911 centers was restored by September 4, 2005, and all of the Louisiana E-911 centers were back in service by October 7, 2005.¹⁰

The storm's devastation was not isolated to BellSouth's network: the networks of every communications service provider in the area were impacted. Moreover, in order to provide

⁸ See Comments by William L. Smith before the FCC's Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, January 30, 2006 at 5 ("Smith Comments"). When main power is lost, central offices rely on backup generators until power is restored. The generators, in turn, rely upon fuel for their operation. Because of Katrina's flooding, the generators were needed for an unusually long period of time; however, re-fueling of the generators was prevented by the very flooding itself. Thus, the generators ultimately lost power in several instances because workers could not reach the facilities to re-fuel them.

⁹ See Odom Statement at 5-6. Many E-911 centers required the re-routing of traffic, and in most instances the re-routing was accomplished within hours after contact with the E-911 center officials. *Id.* at 5.

¹⁰ See Smith Comments at 5-6.

service to their customers, these carriers rely upon BellSouth's network. Thus, in responding to the crisis, BellSouth's mission not only was to re-establish communications on its network, but to assist other carriers in doing the same for theirs.¹¹ With the Commission's cooperation, BellSouth crafted innovative solutions to advance the restoration process. For example, using its corporate network, BellSouth provided an unaffiliated interexchange carrier an interLATA facility route that enabled the carrier to bypass its own disabled switch in New Orleans.¹² And, BellSouth used the same network to bypass its own disabled local switches to provide temporary local service in the New Orleans area *via* switches in Baton Rouge.

Further, in order to restore service as quickly as possible and repair the considerable damage to BellSouth's outside plant and central office equipment, BellSouth was required to make changes to its network components. Copper cables were replaced with fiber; some subscribers were connected to different central offices *via* subscriber line carrier facilities; and tandem arrangements were changed to ensure efficient routing of network traffic.

Cellular carriers were also significantly impacted by Katrina.¹³ BellSouth established a special team of technicians to inspect and repair circuits to wireless cell sites in Louisiana and Mississippi. Where repair was not possible, the team looked for alternative arrangements, such

¹¹ BellSouth's disaster restoration plan calls for concentration on the highest priority circuits first, specifically those which support public safety including hospitals, E-911 centers and law enforcement. Next, BellSouth focuses on supporting other carriers, including the wireless industry. Though the plan's stages are stated sequentially, BellSouth often performs the plan's restoration elements simultaneously (as was the case in the Katrina restoration). *See* Odom's Statement at 5.

¹² The interexchange carrier's switch in New Orleans not only handled interexchange calls originating and terminating in the New Orleans area, but also was an aggregation center and provided the switching function for calls originating in other states.

¹³ Prior to the storm's landfall, BellSouth invited several key carriers to utilize its emergency command center in Atlanta, Georgia, which is the control center from which BellSouth coordinates disaster response, oversees restoration efforts, and works with other carriers to restore communications. BellSouth and wireless industry members developed a joint wireless restoration plan that focused on interoffice rings, prioritized cell site restoration and the placement of microwave facilities. *See* Smith Comments at 6.

as microwave technology, to restore service. In one instance, when the cellular provider's switch in Metairie, Louisiana went out of service, BellSouth technicians designed and installed a complex transport arrangement from Louisiana to Texas in order to re-route traffic.¹⁴

BellSouth's restoration activities could not have proceeded without the Commission's cooperation and support.¹⁵ The Commission recognized that existing rules, designed to operate under normal conditions, can have unintended consequences in emergency situations. In the wake of Hurricane Katrina, the imperative was to re-establish communications channels. Without the Special Temporary Authority ("STAs") and rule waivers that the Commission granted, BellSouth could not have used its internal corporate network or provided interLATA transport alternatives. Nor would BellSouth have been able to change network facilities or network routing quickly. Instead, such efforts would have been delayed by the network change notification rules.

The Commission's willingness to relax regulatory requirements so that BellSouth could respond efficiently and effectively to the disaster was critical to the restoration efforts. The experience gained from Katrina demonstrates that catastrophic events require exceptional responses, and rules and regulations designed to function in conventional business circumstances can block or delay, albeit unintentionally, the emergency actions demanded by the exigencies of the situation. Indeed, the very need to assess the rules' impact on BellSouth's restoration options

¹⁴ See *In the Matter of Petition of BellSouth Corporation for Special Temporary Authority and Waiver to Support Disaster Planning and Response*, WC Docket No. 06-63, Petition of BellSouth at 3 (April 4, 2006).

¹⁵ For general discussion of the history of rules and STA relief granted by the Commission to BellSouth and other carriers to aid restoration and recovery efforts in response to Hurricanes Katrina and Rita (and to give the companies' "flexibility to engage in disaster response planning ahead of an actual disaster"), see *In the Matter of Petition of BellSouth Corporation et al. for Special Temporary Authority and Waiver to Support Disaster Planning and Response*, WC Docket No. 06-63, Order, (June 9, 2006) ("Disaster Order").

in handling a catastrophe detracts from the focus and energy needed to be successful in the restoration itself and is inconsistent with the universal interest in getting communications networks and services operational as quickly as possible.

Speedy response and cooperation from the Commission was extremely helpful in the past and undoubtedly will be needed in dealing with future disasters. Pro-active planning for such disasters, however, entails more than Commission willingness to ease regulatory restrictions for un-anticipated recovery and restoration challenges. It should also include the automatic relaxation of those restrictions – in disaster situations – that are expected to be necessary based on experience. A good start in this regard would be for the Commission to make the disaster recovery planning and response waiver and STA relief provided in the Katrina and Rita contexts permanent. The need for this kind of regulatory innovation is underscored by the Panel's findings and recommendations.

II. THE PANEL'S RECOMMENDATIONS.

The Independent Panel made recommendations in, and the *NPRM* seeks comment on, four areas: (1) disaster pre-positioning for the communications industry and the government in order to enhance and ensure network reliability and resiliency; (2) improving recovery coordination between and among emergency responders, governmental entities and communications infrastructure providers; (3) improving the operability and interoperability of public safety and emergency communications; and (4) improving communication of emergency information to the public during a crisis.

On the whole, BellSouth supports the bulk of the Panel's recommendations, though some of the recommendations require refinement. Thus, BellSouth will not use these Comments to discuss every recommendation or proposal presented in a Report with which it broadly agrees.

Accordingly, these Comments discuss at length only those recommendations that, from BellSouth's perspective, merit particular consideration by the Commission. In addition, these Comments contain further proposals that are also consistent with the Report's findings and recommendations. These additional changes, which are essentially of a streamlining nature, warrant Commission consideration in this proceeding.¹⁶

A. Disaster Pre-positioning for the Communications Industry and the Government.

1. Identification of Best Practices: the "Readiness Checklist."

The Panel recommends that the Commission and each industry sector collaborate to devise and publicize sector-specific disaster readiness recommendations. The proposed "Readiness Checklist" would be premised upon disaster readiness "best practices" identified in each sector and would be authored by designated standards bodies with requisite expertise. The checklist would be expected to cover a range of pre-positioning activities, such as business continuity planning, training exercises, communications planning for "key players," and data system management and protection through the use of strategic archiving and backups.¹⁷

BellSouth generally supports the idea of engaging the leadership of U.S. industry sectors for the purpose of business continuity and disaster planning that would be consistent, known and generally predictable across and within those sectors. BellSouth believes that the Alliance for Telecommunications Industry Solutions ("ATIS"), which historically has been heavily involved in interconnection and interoperability standards development and other complex

¹⁶ The Commission has invited "broad comment on the Independent Panel's recommendations and on the measures the Commission should take to address the problems identified." *NPRM* at ¶ 6. BellSouth's additional proposals (e.g., relating to automatic waivers and STA for certain rules) are fully consistent with that invitation.

¹⁷ *NPRM* at ¶ 8; Report at 31.

communications issues would be ideally suited to the task of developing the Readiness Checklist.¹⁸

BellSouth would caution the Commission, however, against mandating specific criteria or guidelines for business continuity plans, whether based on a Readiness Checklist, or any other platform presented by an appropriate standards body. In BellSouth's experience in dealing with Katrina, the challenges posed by such a disaster will be unique, to varying degrees, to each service provider. Having a "one size fits all" readiness checklist, despite the advantages of consistency and predictability it may facially offer, will only provide a false sense of security that a given service provider is, in fact, in an optimal state of disaster readiness. What may be a very effective disaster pre-positioning plan for one service provider may go too far, or not far enough, for a different provider who may expect, based on experience, to face a different (broader or narrower) set of challenges in any given disaster situation. Communications infrastructure providers and operators need flexibility to form their own judgments, in the end, although having a "best practices" or "Readiness Checklist" would be a helpful starting point.¹⁹

¹⁸ The *NPRM* and the Panel specifically reference the Commission's Network Reliability and Interoperability Council ("NRIC") and the Media Security and Reliability Council ("MSRC"), who have taken steps to identify and develop "best practices" for disaster planning. Their work is certainly a helpful start in the process of pre-positioning the communications industry for disasters in the future. This is not an endorsement, *per se*, of the NRIC's existing best practices checklist. Rather, BellSouth recommends that the NRIC's checklist be carefully reviewed in the light of lessons learned from Hurricane Katrina, and modified accordingly.

¹⁹ Also with respect to communications pre-positioning, BellSouth supports the Panel's recommendation that the Commission take steps to ensure that the public safety community is aware of the availability and capabilities of alternative communications technologies and emergency communications pre-positioning resources that might provide critical back-up functionality in a disaster. See Panel Report at 36, 38; *NPRM* at ¶¶ 9, 14. Many service providers did not make use of, or did not position themselves to make use of, systems such as the Telecommunications Service Priority System – "TSP," which is a system for prioritizing the provision and restoration of telecommunications services, or the Government Emergency Telecommunications Service – "GETS," an integrated commercial network communications backbone for critical users in the event of a national disaster. The FCC should make service providers aware of the existence and benefits of these systems and alternative communications technologies for use in disaster situations, and should coordinate with public safety forums to spread the word. However, the Commission should confine its role to educating service providers on these

Finally, the Panel's readiness checklist recommendations could be particularly useful in the E-911 readiness context. Specifically, public safety access points ("PSAPs") should be encouraged to meet a consistent set of guidelines or standards to ensure their readiness for disaster situations. As opposed to the issuance of mandates, however, the Commission could achieve this goal by providing PSAP certifications or "report cards." The certifications would score each PSAP or E-911 center on the basis of a set of objective readiness guidelines (e.g., NRIC's best practices) and other factors (e.g., the existence and extent of reciprocity agreements with other PSAPs). Such a readiness plan for E-911 centers and PSAPs will encourage them to take specific steps to achieve and maintain "best-in-class" disaster readiness.

2. FCC regulatory requirements pre-positioning.

The Independent Panel recommends that the Commission explore amending its rules to permit automatic grants of certain types of STAs and waivers for geographic areas declared by the President of the United States to be "disaster areas."²⁰ Experience reveals that certain waivers and STAs (whether the result of carrier petitions or upon the Commission's own motion) often are necessary in disaster-response situations, and the elimination of the petition-first regulatory paradigm would be appropriate for such rules.²¹

programs, systems and technologies and their advantages, and should eschew the heavy hand of mandatory regulation. This will enable the Commission to enhance service provider awareness on a critically important issue, while ensuring that the focus of industry remains on responding to the challenges posed by disasters, and not the management of undue regulatory burdens and exposures that might attend those responses.

²⁰ See *NPRM* at ¶ 9; Report at 32-33. The Commission unquestionably has the authority to grant STA relief from enforcement of provisions of the Act, or waiver relief from application of Commission rules implementing Act requirements, when it is in the public interest to do so. See 47 U.S.C. §§ 154(i), 214(a) and 303(r); 47 C.F.R. § 1.3; *Disaster Order* at ¶ 9; *Joint Application by BellSouth Corporation, et al. for Provision of In-Region, InterLATA Services in Florida and Tennessee*, Order, 20 FCC Rcd 14657, 14659 (2005) ("*BellSouth STA Order*"). Granting automatic waivers and STA that, in the Commission's experience, is needed to promote and ensure effective disaster preparedness and pre-positioning is clearly in the public interest. See *Disaster Order* at ¶ 2; *BellSouth STA Order* at 14658-69.

²¹ See *Disaster Order* at ¶ 3.

BellSouth strongly supports the Panel's recommended approach in this regard.

Moreover, BellSouth believes that the availability of such relief (whether waiver or STA) should not only be available upon a Presidential declaration of disaster, which necessarily *follows* catastrophic events, but should also be available whenever a carrier determines that it must invoke its emergency response plan *in advance of* a clear disaster threat. This would facilitate not only restoration and recovery pre-positioning, but also damage mitigation and outage prevention. And, this approach would be fully consistent with the Commission's *Disaster Order*, in which the Commission credited carriers' need for regulatory "flexibility to engage in disaster response planning ahead of an actual disaster," by granting that flexibility (*e.g.*, waivers and STA from enforcement of section 272) to BellSouth, Verizon and Qwest, as it had earlier to AT&T.²²

A good example of regulatory requirements that, in BellSouth's experience (and that of other carriers), should be eased through pro-active STA relief are section 272's information-sharing proscriptions. The sharing of information that section 272 requirements preclude is critical to effective disaster planning. Through the sharing of such information, carriers are able to evaluate and establish alternate retreat points and traffic routing (or re-routing) paths in the event of a disaster. The planning must be dynamic: network changes impact past plans, and must constantly be evaluated in order to revise such plans. And, of course, as a disaster nears and its potential impact begins to take shape, carriers need to update pre-existing plans to account for the forecasts and data that rapidly become available.

This type of planning, the necessity of which is universally acknowledged (especially in light of the lessons learned in Katrina), requires information sharing that section 272(c) frustrates

²² See *Disaster Order* at ¶¶ 9-10.

or precludes outright. If carriers must wait for disaster to strike, or to become acceptably imminent, before they will be allowed to coordinate with section 272 affiliates on a response plan that involves the sharing of network information, then a critically valuable opportunity to avoid or mitigate service disruption is lost. Any pro-active approach adopted by the Commission in response to the Panel's recommendation that it pre-position for regulatory requirements must address the area of advance planning, which should include BOC and section 272 affiliate network information sharing.

An example of a rule waiver that would be demonstrably necessary *before, during and after* a disaster is with respect to the Commission's network change disclosure rules.²³ Effective response to network disruption must include the ability to make instant determinations to change equipment types or re-route traffic. As the Commission itself has observed, compliance with the network change disclosure rules can impede restoration efforts and delay recovery.²⁴ The logic that supports granting carriers the flexibility to effectively restore telecommunications services without advance notification and waiting periods during or after a disaster is no less valid when a carrier is planning to respond to an imminent disaster. There is no good rationale for waiting until disaster has struck to get the relief needed to pre-position the response(s) that the disaster is likely to occasion. A pro-active, pre-positioning regulatory approach, thus, must include the pre-positioning of rules waivers and STA relief if it is to be effective.²⁵

²³ See 47 C.F.R. §§ 51.325-335

²⁴ See *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Order, DA 05-2475 (September 21, 2005); *Disaster Order*, ¶ 19.

²⁵ See *Disaster Order* at ¶¶ 4, 6, 9-10, 19. A representative listing of the wireline and wireless regulatory requirements that BellSouth believes should be made subject to any automatic waiver (or STA relief from enforcement of Act provisions from which the rules are derived) whenever a carrier invokes its disaster response plan, or when the President declares a disaster for defined "disaster areas" is attached to these Comments as Appendix A.

It follows, then, that BellSouth generally favors the wireline-related waivers and STA outlined in the Panel's Report, whether the subject is regulatory pre-positioning in advance of a disaster, *i.e.*, when a carrier determines that it should invoke its emergency response plan for a threatened disaster, or after the President declares a disaster.²⁶ These include, for example, automatic waiver and/or STA with respect to: (1) the aging residential numbers rule (47 C.F.R. § 52.15(f)(ii)), so that customers requiring a prolonged but temporary disconnection of service can retain their old numbers upon being re-connected; (2) Part 4's communications disruption reporting requirements (47 C.F.R. § 4.9); and (3), on an as needed basis, relief should be granted from the Form 477 reporting requirements for local competition and broadband data.²⁷ BellSouth similarly supports automatic waivers and STA relating to the wireless industry, some of which are also proposed by the Panel in its Report.²⁸

3. Government outage monitoring – streamlined reporting.

The Independent Panel recommended that the Commission “coordinate all federal [and state] outage and infrastructure reporting requirements in times of crisis.”²⁹ The intent here is to relieve communications network providers from multiple requests for information from federal, state and local authorities at a time when their resources are under the extreme stress of a disaster. Addressing outages and restoring service should be a service provider's first priority; its obligation(s) to report on those outages must come second. This does not mean that outage reporting is not useful or necessary. In a disaster, however, having one stop for reporting outage information strikes the proper balance between governments' need to be informed of outages and

²⁶ See Report at 32-33.

²⁷ See *id.*

²⁸ See *id.* at 33.

²⁹ NPRM at ¶ 9; Report at 33-34.

progress in restoring service, and providers' need to fix the problems. The Commission is well-positioned to serve as the single repository and point of contact for outage information. As the Panel suggests, the Commission should work with industry and their trade associations to develop a consolidated set of data and geographic areas for data collection for use in such emergencies.

Finally, the Commission should take all appropriate steps to ensure that proprietary information that is gathered and reported during an emergency outage are maintained as confidential, as recommended by the Panel.³⁰

B. Recovery Coordination.

The post-Katrina recovery effort was beset by problems, and the restoration of communications service experienced its share of those problems. Among the challenges noted by the Panel were: (1) difficulties experienced by infrastructure repair crews in gaining access to affected areas due to inconsistent and unclear access requirements; (2) the limited access of service providers to power and generator fuel (and, in some instances, the commandeering of such supplies by authorities who used the fuel for other purposes); (3) lack of security for communications infrastructure and support personnel; and (4) poor coordination between and among state and local officials and communications industry representatives, and among the federal, state and local officials themselves regarding communications matters.³¹

The Panel made a number of recommendations to address the "significant challenges" observed with respect to "maintenance and restoration of communications services after

³⁰ Report at 34; *NPRM* at 4.

³¹ See Report at 15.

Hurricane Katrina.”³² On the whole, BellSouth supports the Panel’s recommendations, with special emphasis on the following proposals.

1. Emergency responder classification.

BellSouth believes it is critical that communications infrastructure personnel be classified as “emergency responders” in order to ensure appropriately high levels of access to affected areas in a disaster, security for personnel engaged in repair and maintenance activities in those areas, and “standing” authorization for the acquisition of power and fuel for service facilities and repair vehicles. These are *the* top logistical priorities for communications service providers in responding to emergencies like Katrina: providers’ repair and maintenance crews and supervisors must be able to get to affected areas, must be secure while they are there, and must be able to have commercial power and emergency generator re-fueling ability, if necessary, throughout the crisis.³³ If any of these core needs goes unmet, communications capabilities suffer. It is that simple.

In this regard, the Panel expressed its support for the National Security Telecommunications Advisory Committee’s (NSTAC’s) recommendation that telecommunications infrastructure providers and their repair personnel be assigned emergency responder status under the Stafford Act, and that this designation be incorporated into the

³² NPRM at ¶ 11.

³³ The impact of commercial power loss and restoration in a disaster setting cannot be over-emphasized. Commercial power to wire centers and tandems is of paramount importance to quick restoration of phone service. In the immediate aftermath of Katrina, in a significant number of instances commercial power restoration to communications infrastructure facilities was not achieved with requisite speed. The back-up generators that ultimately shut down due to the flood-caused inability to re-fuel them were never meant to serve as long-term commercial power replacement solutions. In any event, back-up generators cannot perform a long-term power service function without constant re-fueling, which was prevented by the flooding, security issues and recovery coordination problems presented in the Katrina response.

National Response Plan.³⁴ BellSouth strongly agrees with this proposal and believes that the Commission should endorse the legislative review and amendment of the Stafford Act and Homeland Security Act of 2002 necessary to effectuate NSTAC's and the Panel's proposal.

2. Credentialing requirements for emergency responders.

BellSouth agrees with the Panel's (and NSTAC's) recommendation that, in conjunction with the classification of communications infrastructure providers and their repair and maintenance personnel as "emergency responders," there should also be a system for credentialing such personnel to enable them to gain access to affected areas post-disaster. Credentialing will provide an important additional layer of security and identification for workers, by ensuring that only personnel who have been trained to execute their functions in a disaster setting will be chosen to access affected sites during the crisis.

BellSouth agrees that credentialing guidelines need to be developed at the national level and that the Commission should work with other appropriate federal agencies to develop the national credentialing guidelines and requirements. BellSouth further agrees with the Panel that these guidelines should be crafted for all communications infrastructure repair workers (e.g., wireline, wireless, satellite, WISP, cable, broadcasting).³⁵ Inter-modal application of these guidelines will promote consistent approaches to the critical issues of determining who should be

³⁴ See 42 U.S.C. §§ 5121 *et seq.*, and 6 U.S.C. § 101. See Report at 35. The Stafford Act authorizes the Federal Emergency Management Agency (FEMA) to provide support and essential assistance during a natural or national disaster, primarily to state and local governments. Assistance to the private sector is quite limited, essentially covering quasi-governmental entities (e.g., the Red Cross). The Act does not expressly authorize the support of critical telecommunications infrastructure owners and operators as emergency responders. Communications infrastructure owners and operators are similarly not contemplated by the Homeland Security Act's provisions for preparation and response to major disasters or terrorist events. These omissions lessen communications service providers' ability to respond to disasters, and undermine their restoration efforts after disasters strike.

³⁵ See NPRM at ¶¶ 11-12; Report at 34.

permitted access to affected areas in a crisis, and what level of disaster training such persons should have.³⁶

Moreover, state and local governments should be encouraged to develop and implement their own credentialing programs in accordance with national guidelines. Serious inefficiencies result from credentialing requirements that vary between states. A carrier's deployment of technicians trained to address disaster recovery scenarios typically will not be state-centric; rather, such personnel will often be required to move from state to state as part of a regional disaster recovery process. The more consistency there is among states regarding credentialing, the more efficient the restoration process will be.

3. Utilization of state/regional coordination bodies.

The Panel recommends that the Commission work with state and local governments, and industry, to better utilize regional, state and local coordinating capabilities.³⁷ BellSouth agrees. As the Panel observed, although the National Coordination Center for Telecommunications ("NCC") functioned effectively in coordinating communications network recovery in the Katrina aftermath, that effectiveness was limited by the fact that: (1) the NCC's membership did not include a broad cross-section of the communications industry; and (2) state and local governments were not part of the NCC's coordination efforts.³⁸

³⁶ Also in the context of improved recovery coordination, the Commission seeks comment on the establishment of two websites that would be designed to provide information on state emergency management contacts, the Commission's emergency response team's contact information and disaster response and outage recovery procedures, and information on post-disaster recovery areas for communications providers. *NPRM* at ¶ 14; Report at 36-37. BellSouth endorses these recommendations, and believes that the websites will be very helpful to service providers in identifying key resources and information that they will need in the event of a disaster.

³⁷ See Report at 35.

³⁸ See *id.* at 19.

State and local government are critical to communications network recovery. Thus, their representatives should be a part of pre-disaster and post-disaster communications recovery coordination led by the NCC. Moreover, to achieve and enhance that ability, the Commission should engage state governors, who have the proper organizational capabilities, resources and command-and-control functions to effectuate coordination. Their leadership, as Katrina proved, is critical, and it will not be enough for the Commission to take steps to promote coordination without also creating a framework for leadership in crises, without which such coordination will be ineffective, if not impossible.

C. First Responder Communications.

The Panel made a number of recommendations designed to address public safety communications capabilities in a disaster. Rather than attempt to respond on each specific Panel recommendation, BellSouth will provide a more global commentary in this area.

Generally speaking, the Panel's recommendations in this area are well-intentioned. However, the recommendations cross into areas of E-911 and emergency network design and decision-making that should be left to service providers, their network engineers and their customers. These decisions should not become the subject of Commission mandates, a risk that some of the Panel's recommendations certainly run, if adopted.

For example, BellSouth agrees that public safety-supporting network infrastructure should be optimally designed, maintained and built to ensure functionality in a disaster. BellSouth, thus, would agree with the notion that redundancies like the placement of backup public safety answering points ("PSAPs") at significant geographic distances, or deploying dual active 911 selective routers, can make good sense from a public safety standpoint.³⁹ But, there

³⁹ See *NPRM* at ¶ 17; Report at 40-41.

may be numerous ways that network engineers could deploy or configure network facilities to achieve the desired results -- or even improve upon them -- other than what the Panel has recommended that might make even better sense for a given service provider. These innovations should not be stymied by mandates, and the lessons learned in Katrina do not require a different conclusion. The Commission should educate service providers on the need for emergency back-up facilities and redundancies in emergency network design generally, but should avoid issuing any mandates in this regard.⁴⁰

Instead of issuing restrictive mandates that actually may inhibit real improvement of E-911 resiliency, the Commission can assist in ensuring “more robust E-911 service” by providing relief from interLATA restrictions that currently prevent BOCs from maximizing E-911 network design and transport efficiencies.⁴¹ Such relief, for example, would permit trunking (*e.g.*, tandem-to-tandem), alternate PSAP routing, and E-911 load-sharing solutions across LATA boundaries that would greatly enhance E-911 resiliency. Indeed, doing so would enhance E-911 communications effectiveness without imposing the extraordinary (and largely unrecoverable) expenses upon carriers that would result from prescribed solutions (*e.g.*, tandem redundancies in LATAs, *etc.*).⁴² Providing such relief, moreover, is consistent with the Panel’s recommendations regarding the need for secondary back-ups for PSAPs as a part of E-911 resiliency planning.⁴³

⁴⁰ Similarly, BellSouth supports the Panel’s other recommendations in this area, but only to the extent that they encourage the Commission to serve an educational, not regulatory, role (*e.g.*, the Panel’s recommendation that the Commission educate the emergency medical community about emergency communications, including various priority communications services (*e.g.*, GETS, TSP, *etc.*)).

⁴¹ See Panel Report at 39.

⁴² This is consistent with, and further underscores the need for, the relief sought by BellSouth in its *Section 272 Petition*, currently pending before the Commission. See *In the Matter of BellSouth Corporation’s Petition for Waiver*, WC Docket No. 05-277 (September 19, 2005) (“*Section 272 Petition*”). Moreover, it is important to recognize the need for pre-positioning in this area as well. If a carrier is prevented from implementing these kinds of interLATA E-911 solutions until a disaster strikes, the effectiveness of the solutions is diminished. It would be helpful, thus, for the Commission to craft the

Finally, BellSouth would encourage the Commission to take action on the Panel's recommendations regarding first responder communications interoperability. Critical to the management of any disaster (natural or otherwise) is the ability of first responders to be able to talk across disciplines and jurisdictions *via* radio or other dedicated communications equipment and systems, to be able to exchange voice and data with each other upon demand, and in real time, and to act in a coordinated and effective fashion.

Cross-discipline, multi-jurisdictional coordination and planning, thus, is needed to ensure effective interoperability, both with respect to communications systems and procedures in an emergency. This cannot be achieved without effective leadership, and that leadership cannot wait for a disaster to happen in order to emerge. One of the first tasks for properly designated interoperability leadership should be ensuring that standards for technical interoperability are developed and implemented across disciplines and jurisdictions, and that compliance is monitored and enforced. The Commission, as *the* agency with communications expertise germane to all of the disciplines and jurisdictions that preside over first responders, should use that leverage to ensure proper leadership, and a path going forward for that leadership, is established.

III. THE COMMISSION'S ADDITIONAL REQUEST FOR COMMENT.

On July 26, 2006, the Commission issued a public notice seeking comment on the applicability of the Panel's recommendations to all types of disasters, listing as examples both natural (*e.g.*, floods and fires) and "other" disasters (*e.g.*, terrorist attacks, flu pandemics, and

relief as a disaster pre-positioning or planning matter, and not something that it might make available only upon the occurrence of a disaster.

⁴³ See Panel Report at 39 (Commission should "eliminate any regulatory prohibition against the transport of 911 across LATA boundaries" as part of Panel's recommendation of secondary back-up PSAP solution).

industrial accidents).⁴⁴ Commenters are asked to address the issue of broad applicability as outlined, and also to address the impact of the nation's "diverse topography," as well as the diversity of communications capabilities across regions' impact on the recommendations.

Unfortunately, the *NPRM* does not give commenters the benefit of a report such as the Panel's Report upon which to form helpful judgments. Thus, BellSouth is not in a position to address the questions raised by the Commission other than in the most general terms. BellSouth expects that, should the Commission desire to apply the Panel's recommendations beyond the areas covered by the Panel's work and its Report, the Commission will seek public comment with the kind of specificity that is warranted (*e.g.*, as it has done in the context of Hurricane Katrina).

Having said that, BellSouth believes, in general, that the flexibility and forward-leaning approach contained in the Panel's Report and recommendations would almost certainly be useful in dealing with other disasters of similar scale and scope. Although not every type of disaster or catastrophic incident will present the same types of challenges to communications networks, there will clearly be common themes – from a communications perspective – that infrastructure providers will encounter. For those situations, disaster pre-positioning, recovery coordination among emergency responders (with the scope of that term appropriately expanded) and governmental entities), emergency communications operability and interoperability and communication of emergency information to the public will certainly be critical, as they are in the case of a hurricane response.

⁴⁴ *In the Matter of Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*; Notice of Proposed Rulemaking, Request for Comment on Applicability of Recommendations to All Types of Disasters, DA 06-1524 (July 26, 2006) ("*NPRM Addendum*").

It is reasonable to state that the solutions presented in the Panel's report and recommendations will likely be helpful in the broader disaster context. Those (and any other) solutions, however, should *not* be presented as mandates by the Commission. Rather, communications infrastructure providers must have flexibility to address different types of disasters on the merits that they present. The Commission, thus: (1) should not, through mandates, limit the options that infrastructure providers should have in pre-positioning for, and dealing with, diverse types of disasters (natural or non-natural); and (2) should provide proactive regulatory relief so that providers have maximum flexibility to handle such diverse disasters effectively.⁴⁵

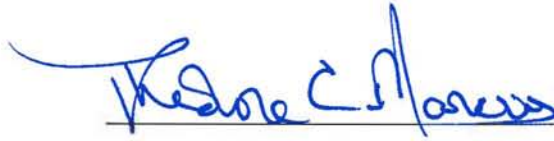
III. CONCLUSION

BellSouth encourages the Commission to adopt the Panel's recommendations as outlined and discussed in these Comments. Moreover, and consistent with the pro-active emphasis of the Report and its recommendations, the Commission should also adopt the automatic waiver and STA proposals recommended herein.

⁴⁵ Finally, with respect to the *NPRM Addendum's* question(s) about the impact of communications diversity on the Panel's recommendations, BellSouth submits that it simply is not in a position, based on the present record and the Panel's Report (which neither identifies nor addresses the issue of communications diversity), to provide even a general response to the Commission's questions. NRIC's best practices recommendations speak to the issue, and BellSouth generally agrees with what appears in those best practices, but BellSouth cannot comment more meaningfully until the Commission provides greater detail on what it seeks from commenters on this subject. Also, it is not possible for BellSouth to extrapolate from the Katrina disaster context what it believes the Commission should do, or be prepared to do, in disasters that do not involve infrastructure damage, *e.g.*, a flu pandemic. BellSouth recommends that the Commission conduct a thorough analysis of the communications challenges that communications service providers would encounter, or likely encounter, in such disasters and then seek public comment stemming from that analysis, as it has done in the present context.

Respectfully submitted,

BELLSOUTH CORPORATION



Theodore C. Marcus
Bennett L. Ross

1133 21st Street, NW
Suite 900
Washington, DC 20036
(202) 463-4155

Theodore Kingsley
Richard M. Sbaratta

Suite 4300
675 West Peachtree Street, N. E.
Atlanta, Georgia 30375
(404) 335-0720

Date: August 7, 2006

#642403-v3

APPENDIX A

REGULATORY REQUIREMENTS TO WHICH AUTOMATIC WAIVER OR STA SHOULD APPLY WHEN PRESIDENT DECLARES DISASTER OR DISASTER RESPONSE PLANS ARE INVOKED BY CARRIERS

REQUIREMENT	DESCRIPTION	RATIONALE FOR RELIEF
47 C.F.R. § 61	Dominant carrier tariffing requirements.	Compliance with these requirements with respect to tariffs or contracts associated with restoration services may be impossible during a disaster and would impede efforts at disaster recovery, at a minimum. Post-emergency, carriers can determine whether such services are covered by existing tariffs or require modified or new tariffs to be filed. <i>See In the Matter of Petitions of BellSouth, Verizon and Qwest for Special Temporary Authority and Waiver to Support Disaster Planning and Response</i> , WC Docket No. 06-63, DA 06-1251, ¶ 15 (rel. June 9, 2006) (“ <i>Disaster Order</i> ”).
47 U.S.C. § 272, 47 C.F.R. §§ 64.1901-1903, 47 C.F.R. § 32.27	Structural separation requirements, non-discrimination safeguards, affiliate transaction rules, arms-length requirements, etc.	In order to respond effectively to a disaster, incumbent carriers may need to use their corporate networks, personnel and facilities, including their affiliates’, throughout their entire regions, and to share information in order to properly plan for a disaster, e.g., through development and implementation of integrated disaster recovery plans. <i>See Disaster Order</i> , ¶¶ 2, 11-14. Compliance with affiliate transactions and arms-length requirements may be impossible during a disaster and would impede efforts at disaster recovery, at a minimum. Post-emergency, carriers should use available records and rely, if necessary, on estimates or other reasonable means to establish the prices for the provision of assets and services between companies for Part 32 purposes. <i>See Disaster Order</i> , ¶ 14.

REQUIREMENT	DESCRIPTION	RATIONALE FOR RELIEF
47 C.F.R. § 27.53(a)(1)	Limits for radio frequency emissions.	Temporary relief from WCS band emission mask limits would enhance restoration efforts. Reducing the limits in such emergencies would allow providers to leverage operational stations as needed in order to ameliorate impact of non-operational facilities until they are restored.
47 C.F.R. § 27.53(a)(2)	WCS emission limit for mobile stations. Rule also requires a WCS PC modem card to meet the stricter rules of mobile devices rather than the rules for fixed devices.	These limits effectively preclude any mobile operations in 2305-2320 MHz or 2345-2360 MHz bands. During restoration efforts, temporary relief from these limits would provide flexibility needed for service restoration, by permitting providers to operate wireless broadband equipment in these bands. This would assist emergency relief teams, which would benefit from internet connectivity for portable/mobile devices in crises situations. Also, PC modem cards provide emergency responders and restoration crews with Internet connectivity as much as 3 miles from transmitters. Such cards are not permitted under a 1996 rule designed to protect satellite digital audio radio service ("SDARS") transmission. PC modem cards and equipment available today generate negligible, if any, interference to SDARS service. Relief requested in a disaster, thus, will promote service restoration, without leading to interference with SDARS service transmission.
47 C.F.R. § 27.53(l)(2)	Emission mask requirements for fixed devices in the Broadband Radio Services and Educational Broadband Service ("BRS/EBS") bands of operation.	Although somewhat less onerous than the WCS band limit, emergency restoration efforts may result in some amount of temporary interference that impacts BRS/EBS limits. Immediate regulatory relief during disaster restoration efforts on a pre-positioned basis would be helpful to those efforts.

REQUIREMENT	DESCRIPTION	RATIONALE FOR RELIEF
47 C.F.R. § 27.53(1)(4)	Similar emission mask requirements for portable/mobile devices in the BRS/EBS bands.	Although somewhat less onerous than the WCS band limit, emergency restoration efforts may result in some amount of temporary interference that impacts BRS/EBS limits. Immediate regulatory relief during disaster restoration efforts on a pre-positioned basis would be helpful to those efforts.
47 C.F.R. § 27.55(a)(1)	Signal strength limits at the borders of WCS licensed service areas.	Waiver of the limits during recovery efforts will facilitate necessary coverage requirements caused by the disaster.
47 C.F.R. § 27.55(a)(4)(i)-(ii)	Signal strength limits at the borders of BRS/EBS licensed service areas.	Waiver of the limits at the borders during recovery efforts will facilitate coverage requirements necessitated by the disaster.
47 C.F.R. § 27.1221(b)-(e)	Interference protection and height benchmarking rules for the BRS/EBS band.	Pre-positioned temporary relief from interference protection rules during recovery efforts will save time required to perform adjacent markets coordination analyses. Also, it is necessary to have relief for facilities exceeding the height benchmark limit for a period of time until recovery efforts are complete in order to ensure maximum coverage possible while restoration efforts are ongoing.
47 C.F.R. §§ 51.325-335	Network change disclosure rules.	During restoration efforts, flexibility to effectively restore telecommunications services without advance notification and waiting periods is necessary. Effective response to network disruption must include the ability to make instant determinations to change equipment types or re-route traffic. Compliance with the network change disclosure rules can impede restoration efforts and delay recovery. <i>See In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996</i> , CC Docket No. 96-98, Order, DA 05-2475 (September 21, 2005); <i>Disaster Order</i> , ¶¶ 10, 19.

REQUIREMENT	DESCRIPTION	RATIONALE FOR RELIEF
47 C.F.R. § 52.15(f)(ii)	Aging numbers rule.	Relief from the aging rule for residential customers as well as for business telephone numbers may be necessary for disaster recovery situations (e.g., where customer displacement is protracted due to enduring nature of disaster's effects). <i>See In the Matter of Number Resource Optimization</i> , CC Docket No. 99-200, Order, FCC 05-164 (September 4, 2005).
47 C.F.R. § 4.9(b), (d)-(f)	Outage reporting requirements.	Relief from the reporting requirements will permit maximum resources to be dedicated to, and deployed for, restoration and recovery in responding to disasters.
47 C.F.R. § 64.1120(e)	Carrier change authorization rule.	Carriers may require flexibility to migrate customers in an effort to restore service in the event of a disaster. The 30-day notification requirement of the rules is a significant impediment to that effort, although it is appropriate to require notification after transfer as soon as practicable. <i>See Disaster Order</i> , ¶¶ 17-18.
47 C.F.R. § 52	Local number portability and number assignment rules.	Due to catastrophic damage to communications networks caused by a disaster, carriers may need flexibility to port numbers to destinations beyond prescribed areas (i.e. affected rate centers). <i>See In the Matter of Telephone Number Portability, Numbering Resource Optimization</i> , CC Docket Nos. 95-116, 99-200, Order, FCC 05-61 (2005). The use of local number portability (LNP) for disaster relief should be optional. Service providers need to consider the pros and cons of using LNP for disaster relief as detailed in the April 12, 2006 report of the North American Numbering Council entitled "Final Report on Out of LATA Porting and Pooling for Disaster Relief After Hurricane Katrina".